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**Neutron Beta Decay Studies in the Nab Experiment** JASON FRY, Institute of Nuclear and Particle Physics, University of Virginia, NAB COLLABORATION — The Nab collaboration proposes to measure the electron-neutrino correlation parameter $a$ with a precision of $\delta a/a = 10^{-3}$ and the Fierz interference term $b$ to $\delta b = 3 \times 10^{-3}$ in unpolarized free neutron $\beta$ decay. These results are expected to lead to a new, precise, independent determination of the ratio $\lambda = G_A/G_V$ that will sensitively test CKM unitarity. A long asymmetric spectrometer guides the decay products to two large area silicon detectors in order to precisely determine the electron energy and proton momentum. The Nab apparatus is under installation on the Fundamental Neutron Physics Beamline at the SNS at ORNL and commissioning will begin in the near future. We present an overview of the Nab experiment and the first tests of the spectrometer.

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